

recognizes a certain constant determination of the art of stone-
 implement making by the qualities of the material
 and the muscular activities of man. It has been disputed
 whether the form called " turtle-backs " were one form in the series
 of artifacts, or a misform produced by errors in manufacture. " The
 American archaeologists, who have labored long to repeat the
 processes of the aborigines in stone work, find themselves
 unavoidably making * turtle-backs,' when they are really trying to
 make the leaf-shaped blade." ¹ The handicraftsmen of the
 Smithsonian Institute have not been able to make a leaf-shaped
 blade such as may be seen in the museums, and no Indian has
 been found who could make one. " This is one of the lost arts."²
 Other pieces of rude form have been set aside as chips, or rejects,
 but such are found in use as scrapers, or in handles, and are to
 be recognized as products which belong to the series.³ Some rude
 implements found in the hill gravels of Berkshire, England, have
 been offered as anterior to the paleolithic implements as usually
 classified.⁴ Lubbock said that he could not find in the large
 Scandinavian collections " a single specimen of a true paleolithic
 type." ⁵

128. Forms of stone axes. Stone axes are found
 all over the globe. Chipped, sharpened, polished, grooved,
 pierced, handled, are different kinds which may be set in a series of
 advancing improvement, and under each grade local varieties
 may be distinguished, but the art is essentially the same
 everywhere. " Probably no discovery is older than the fact that friction
 would wear away wood or bone, or even stone."⁶ It was also
 learned that rawhide and sinew shrank in drying, and this fact
 was very ingeniously used to attach handles, the sinew or

membrane being put
on while fresh and wet. American stone axes are
grooved to
receive a handle made by an ingenious adaptation of
roots and
branches with pitch or bitumen. "Bored stone axes
are found in
the tropical regions of America. Although they are
very rare,
they are well executed." ⁷ The device of boring stone
axes appears

¹ Mason, *Origin of Invention* ^ 132. * JAI, XXIV, 44.

² *Ibid.*, 123, 136. * *Ibid.*, X, 316.

⁸ *Intern. Cong. Antjirop.* ^ 1893, 67. ⁶ Mason, *Origin of Invention* * 148.

⁷ Ratzel, *Volkerkunde*, II, 586.